CLAIMS

What is claimed is:

1.   An apparatus for switching packets from a network, the switching apparatus comprising:

5   an ingress receiver that receives packets from the network ("inbound packets"), said packets being destined for an associated output queue;

          a switch fabric coupled to receive said inbound packets from the ingress receiver; and

10   an output traffic manager coupled to receive packets from the switch fabric ("outbound packets"), wherein

          the output traffic manager includes at least one queue,

15   the output traffic manager selectively stores outbound packets into a selected queue and selectively drops outbound packets when the selected queue is at a certain fullness level, and

20   approximately when the output traffic manager drops outbound packets or is about to drop said outbound packets, the output traffic manager communicates to the ingress receiver to drop inbound packets destined for

25   that queue.

2.   The apparatus of Claim 1, wherein the output traffic manager identifies at least the designation of imminently droppable or dropped outbound packets, and

30   wherein the ingress receiver drops inbound packets based on the identified designation.

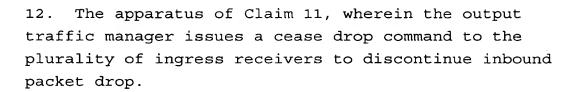3.   The apparatus of Claim 2, wherein said designation comprises a port address to the network.

35

-13-

4.   The apparatus of Claim 2, wherein designation comprises a class of service.

5.   The apparatus of Claim 2, wherein designation comprises a virtual private network.

6.   The apparatus of Claim 1, wherein the output traffic manager issues a cease drop command to the ingress receiver to discontinue inbound packet drop.

7.   The apparatus of Claim 1, wherein the ingress receiver discontinues inbound packet drop after a predetermined time.

8.   The apparatus of Claim 1, wherein the output traffic manager uses the switch fabric to communicate to the ingress receiver to drop inbound packets.

9.   The apparatus of Claim 1, wherein the output traffic manager uses a dedicated communications bus to communicate to the ingress receiver to drop inbound packets.

10.   The apparatus of Claim 1, further comprising a plurality of ingress receivers coupled to receive packets from the network and coupled to the switch fabric, wherein the output traffic manager communicates to the plurality of ingress receivers to drop inbound packets.

11.   The apparatus of Claim 10, wherein the output traffic manager identifies the designation of imminently droppable or dropped outbound packets and wherein the plurality of ingress receivers drop inbound packets having the identified designation.

12. The apparatus of Claim 11, wherein the output traffic manager issues a cease drop command to the plurality of ingress receivers to discontinue inbound packet drop.

13. The apparatus of Claim 12, wherein the output traffic manager uses the switch fabric to communicate to the plurality of ingress receivers to drop inbound packets and cease dropping inbound packets.

14. The apparatus of Claim 12, wherein the output traffic manager uses a dedicated communications bus to communicate to the plurality of ingress receivers to drop inbound packets and cease dropping inbound packets.

15. A method of reducing packet traffic through a switching fabric, the method comprising:

receiving packets from a network ("inbound packets");

transmitting each packet to the switching fabric;

selectively queuing packets from the switching fabric;

detecting imminent or active dropping of packets ("dropped packets") due to a queue being full;

signaling to drop inbound packets destined for said queue; and

dropping inbound packets destined for said queue.

16. The method of Claim 15, wherein said signaling further comprises communicating a designation of the dropped packets.

17. The method of Claim 16, wherein dropping further comprises dropping inbound packets that are the same designation as the dropped packets.

5   18. The method of Claim 16, wherein the designation comprises a port address to the network.

19. The method of Claim 16, wherein the designation comprises a class of service.

10

20. The method of Claim 16, wherein the designation comprises a virtual private network.

21. The method of Claim 15, further comprising issuing

15   a cease drop command to discontinue inbound packet drop.

22. The method of Claim 15, further comprising discontinuing inbound packet dropping after a

20   predetermined time.

23. A set of computer instructions in a tangible medium, said instructions for controlling a device to carry out the following steps:

25   receiving packets from a network ("inbound packets");

       transmitting each packet to a switching fabric;

       selectively queuing packets from the

30   switching fabric;

       detecting imminent or active dropping of packets ("dropped packets") due to a queue being full;

       signaling to drop inbound packets destined

35   for said queue; and

-16-

dropping inbound packets destined for said queue.

Add B1